



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,886	10/15/2003	Christopher A. Rygaard	1010722-991141	7560
26181 7590 05/16/2007 FISH & RICHARDSON P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER MORAN, RANDAL D	
			ART UNIT 2135	PAPER NUMBER
			MAIL DATE 05/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/686,886		RYGAARD, CHRISTOPHER A.	
	Examiner		Art Unit	
	Randal D. Moran		2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

(DETAILED ACTION)

1. Claims 1-24 are pending in the application.
2. Below, Examiner has pointed out particular references contained in the prior art(s) of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claims, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully each reference in its entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner.

Claim Objections

1. The following claims are objected to for lack of antecedent basis.
 - a.) **Claim 2- line 3, Claim 3- line 26, Claim 4- line 4, Claim 6- lines 2-3, Claim 7- line 2, Claim 8- line 3, Claim 15- line 3, Claim 16, line 2, Claim 17- lines 2 and 4, Claim 18- lines 2 and 4, Claim 21- line 3, Claim 22- lines 2, 3, and 4, and Claim 23- line 4** recite the limitation "the piece of

code of the one or more pieces of code.” “The piece of code from the database” would make the claim less ambiguous.

Drawings

1. The objection to the drawings with respect to Figures 1 and 2 has been withdrawn in view of the replacement drawing sheets filed on 3/7/2007.

However, after further review, Figure 3 should also be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Fig 4A- jumping application security system 50, jumping application controller 64. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any

Art Unit: 2135

amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No. 6,931,550.

Although the conflicting claims are not identical, they are not patentably distinct from each other because they either recite a concomitance of the claim features, or they are obvious modifications thereof.

The central computer further comprising means for monitoring the security of the mobile application as the mobile application jumps between the first and second host computers teaches a security module that controls the security of a jumping application. the means for monitoring further comprising, means for inspecting an access control list of the mobile application to determine if code of the mobile application is marked as immutable, and means for replacing immutable code with code known by the central computer to be safe teaches a database that contains one or more pieces of code and a description of each piece of code, wherein each piece of code implements a particular behavior; and wherein the security module further comprises instructions that replace code from the jumping application that implements a first behavior with a piece of code from the database into the jumping application that implements the first behavior.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2135

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claim 24** is rejected under 35 U.S.C. 102(e) as being anticipated by **Freeman (US 6,330,588)**, hereafter "Freeman".

3. Considering **Claim 24**, Freeman discloses a computer-implemented method comprising: receiving a jumping application at a server column 6- lines 45-59) during a jump from a first host to a second replacing code in the jumping application that implements a particular behavior with a piece of code that implements the particular behavior in the jumping application so that the jumping application has the particular behavior when it is executed by the second host (column 14- lines 7-18); and forwarding the jumping application to the second host (column 6- lines 45-59).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-23** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Jansen et al. (NIST Special Publication 800-19 – Mobile Agent Security)**, hereafter “Jansen” in view of **Walsh (US 6,233,601)**, hereafter “Walsh”, in further view of **Freeman**.

3. Jansen and Walsh were provided by the applicant in IDS papers filed on 2/14/2005 and 3/1/2004, respectively.

4. Considering **Claims 1, 5, 9, 14, and 20**, Jansen discloses a computer implemented jumping application security console (p. 9- lines 34-39, p. 14- lines 2-7, reference monitor) that maintains the security of a jumping application that is jumping between one or more hosts connected to the security console (Fig. 1, p. 14- lines 2-25), the security console comprising: a security module that controls the security of a jumping application (p. 14- lines 2-25).

Jansen does not disclose a database that contains one or more pieces of code and a description of each piece of code, wherein each piece of code implements a particular behavior; and wherein the security module further comprises instructions that replace code from the jumping application that implements a first behavior with a piece of code from the database into the jumping application that implements the first behavior.

Walsh does disclose a database that contains one or more pieces of code and a description of each piece of code (column 2, lines 23-25, column 4, lines 25-28 and 37-38), wherein each piece of code implements a particular behavior (column 4, lines 64-67, column 5, lines 1-5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Jansen by a database containing one or more pieces of code and a description of each piece of code, wherein each piece of code implements a particular behavior for the benefit of improved agent operation and to reduce the network overhead (Walsh-column 2, lines 31-32).

The combination of Jansen and Walsh does not explicitly disclose the security module further comprises instructions that replace code from the jumping application that implements a first behavior with a piece of code from the database into the jumping application that implements the first behavior.

Freeman does explicitly disclose a database that contains one or more pieces of code and a description of each piece of code (column 2- lines 30-46, column 8- lines 38-39 and 58-67, column 14- lines 45-57, Fig. 2- item 204) the security module further comprises instructions that replace code from the jumping

application that implements a first behavior with a piece of code from the database into the jumping application that implements the first behavior (column 13- lines 35-50, column 14- lines 7-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Jansen and Walsh by replacing code from the jumping application that implements a first behavior with a piece of code from the database into the jumping application that implements the first behavior for the benefit of enabling the trusted resource to operate substantially protected from corruption (Freeman- column 14- lines 7-9)

5. Considering **Claims 2, 6, 10, 15, and 21**, the combination of Jansen, Walsh, and Freeman discloses the instructions that replace code further comprises instructions that remove any existing code in the jumping application and then instructions that insert the piece of code that implements the particular behavior into the jumping application (Walsh- column 4, lines 37-38, column 8, lines 32-36).
6. Considering **Claims 3, 7, and 16**, the combination of Jansen, Walsh, and Freeman discloses the security module further comprises instructions for receiving a request for a piece of code, by a host, that implements a particular

Art Unit: 2135

behavior for a jumping application (Walsh- column 4, lines 30-35, Freeman- column 7- lines 50-55).

7. Considering **Claims 4, 8, 13, 19, and 23**, the combination of Jansen, Walsh, and Freeman discloses instructions that store a list of the code removed from the jumping application (Jansen- p. 15 lines 15-21, Freeman- column 12- lines 18-35), the instructions to replace the code further comprises instructions that remove the code from the jumping application (Freeman- column 14- lines 7-18, Walsh- column 4, lines 30-35), and instructions that insert the piece of code into the jumping application based on the list of code removed from the jumping application (Freeman- column 14- lines 45-67, Walsh- column 4, lines 37-38, column 8, lines 32-36).
8. Considering **Claims 11 and 17**, the combination of Jansen, Walsh, and Freeman discloses the request further comprises generating a query, by a host to a security console, of the pieces of code contained in a database of the security console and selecting, by the host, the piece of code to be replaced in the jumping application (Walsh- column 6, lines 49-52, column 5- lines 49-57).
9. Considering **Claims 12, 18, and 22** the combination of Jansen, Walsh, and Freeman discloses the replacing the code further comprises downloading the piece of code to the host in response to the selection of the piece of code by the

Art Unit: 2135

host and inserting the piece of code, by the host, into the jumping application to implement the particular behavior (Walsh- column 6, lines 6-17 and 49-62).

Response to Arguments

1. Applicant's arguments with respect to **claims 1-23** have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - US 6,065,039- Dynamic synchronous collaboration framework for mobile agents.
 - US 5,930,514- Replacing modified code with trusted code.
 - US 7,082,604- Utilizing autonomous mobile agents.
 - US 2003/0126457- Software is replaced with secure version every time.
 - US 6,006,328- Replacing vulnerable code.
 - 6,711,583- Restore.

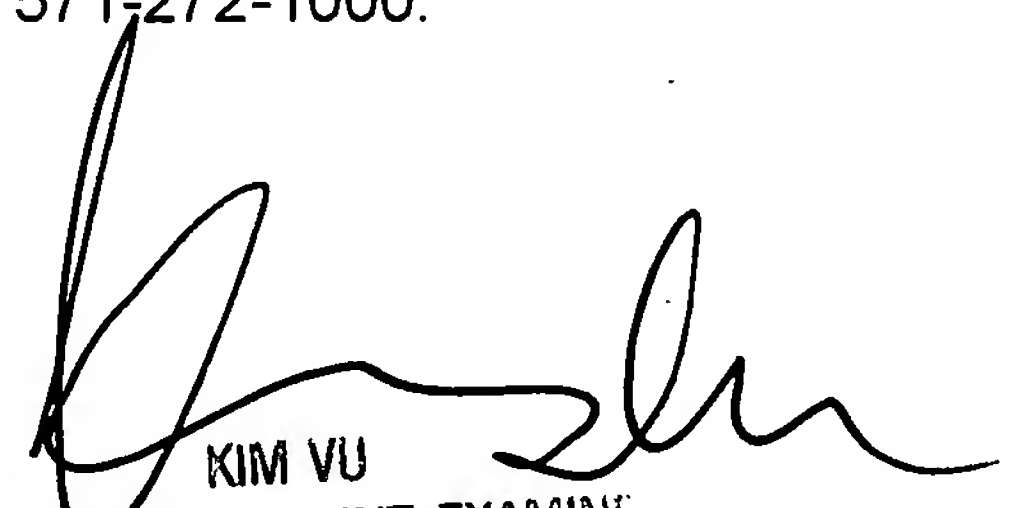
2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randal D. Moran whose telephone number is 571-270-1255. The examiner can normally be reached on M-F: 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Randal D. Moran

RDM
5/8/07


KIM VU
SUPERVISORY PATENT EXAMINEE
TECHNOLOGY CENTER 2100